

REMARKS

Reconsideration of the instant application is respectfully requested. The present amendment along with a Request for Continued Examination (RCE), and is responsive to the Final Office Action of October 10, 2006, in which claims 1-19 are presently pending. Of those, claims 1, 2 and 14-17 remain rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent 6,946,403 to Kellerman, et al. In addition, claims 3-5 remain rejected under 35 U.S.C. §103(a) as being unpatentable over Kellerman, in view of U.S. Patent 5,665,166 to Deguchi, et al. Claims 6, 7, 11-13 and 19 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Kellerman, in view of U.S. Patent Publication 2004/0083975 by Tong, et al. Claims 8-10 remain rejected under 35 U.S.C. §103(a) as being unpatentable over Kellerman, in view of Tong and Deguchi. Finally, claim 18 remains rejected under 35 U.S.C. §103(a) as being unpatentable over Kellerman. For the following reasons, however, it is respectfully submitted that the application is now in condition for allowance.

On December 7, 2006, a telephone interview was conducted between the undersigned and the Examiner to discuss the teachings of the Kellerman and Tong references. No agreement was reached as to the patentability of the claims as amended in the response filed on July 14, 2006.

In the present amendment, claims 1 and 14 have been amended to more particularly point out that electrostatic chucking pedestal further comprises a plurality of gas channels formed through a top surface thereof, the plurality of gas channels also in fluid communication with said bi-directional backside conduit, and wherein said plurality of gas channels are configured to facilitate vacuum assisted chucking of a wafer retained on the electrostatic chucking pedestal. In addition, this feature is also now included in newly added claim 20, which is dependent from independent claim 6. Support for this

amendment is found at least in paragraphs [0025] and [0026] of the specification, as well as in Figure 4(b) (gas channels 415) of the drawings.

As will be seen from an inspection of the Kellerman reference, there is no teaching or suggestion of providing gas channels through the top surface of the chucking pedestal (i.e., clamping plate 110) of Kellerman, such that the application of vacuum pressure to the backside conduit would facilitate vacuum assisted chucking of the wafer 105. Any fluid communication taught in Kellerman does not extend all the way through to the top surface of the clamping 110, and therefore could not accomplish vacuum chucking of the wafer 105.

Secondly, as to the Tong reference, claim 6 has been amended to more particularly point out that the inner and outer zones of the chucking pedestal each have a top surface disposed beneath a wafer placed on the chucking pedestal such that the top surface of the outer zone is capable of selective adjustment to positions both below and above the top surface of the inner zone. Support for this amendment is found at least in paragraphs [0029] and [0030] of the specification, as well as in Figures 8(a) and 8(b) of the drawings.

It should be noted that the Applicants do not, in the first place, concede that the sacrificial hot edge ring 108 surrounding the chuck 102 and supported by the coupling ring 106 in Tong is part of the chucking pedestal (either in whole or part).

Notwithstanding, even if the ring 108 were to be construed as an “outer zone” of a chucking pedestal, it will be seen that the portion of the top surface of the ring 108 disposed below the wafer S, is below the top surface of the chuck 102. Moreover, the distance “d” in Tong represents a gap distance between an overhanging edge of the substrate S and the hot edge ring 108. See Tong, paragraph [0027]. Furthermore, as indicated in paragraph [0028] of Tong, the adjustable coupling 106 is capable of controlling the gap distance “d” from a range of about 0.5 mils to less than 6 mils.


Therefore, because "d" still maintains some positive gap distance between top surface of the ring 108 disposed beneath the wafer S, and the wafer itself, then it is not possible under the teachings of Tong for the top surface of the portion of the ring 108 disposed below the wafer to be adjusted above the top surface of the "inner zone" (i.e., the top surface of chuck 102) as is presently claimed. As a result, the combination of Kellerman and Tong fails to teach or suggest each of the elements of claim 6.

Accordingly, it is respectfully submitted that each of the outstanding §102 and §103 rejections have now been overcome.

For the above stated reasons, it is respectfully submitted that the present application is now in condition for allowance. No new matter has been entered and no additional fees are believed to be required. However, if any fees are due with respect to this Amendment, please charge them to Deposit Account No. 09-0458 maintained by Applicants' attorneys.

Respectfully submitted,
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